

patent application serial no.

Department of Commerce  
Patent and Trademark Office  
for record

01/31/2001 UEDUVIJE 00000110 09744675

01 FC:957	345.00 OP
02 FC:969	135.00 OP
03 FC:967	441.00 OP
04 FC:198	<del>43.00 OP</del>

Void date: 01/31/2001 UEDUVIJE  
01/31/2001 UEDUVIJE 00000110 09744675  
04 FC:198 ~~43.00 OP~~

01/31/2001 UEDUVIJE 00000111 09744675

01 FC:581	40.00 OP
02 FC:198	<del>3.00 OP</del>

09/744675

FORM PTO-1390  
(REV 11-98)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEYS DOCKET NUMBER  
XY-Equine3-USNPTRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371US APPLICATION NO. (If known, see 37 CFR 1.5  
60/094,720  
60/113,143INTERNATIONAL APPLICATION NO.  
PCT/US99/17165INTERNATIONAL FILING DATE  
29 July 1999PRIORITY DATE CLAIMED  
30 July 1998  
18 December 1998

## TITLE OF INVENTION

Equine System for Non-Surgical Artificial Insemination

## APPLICANT(S) FOR DO/EO/US

Edward L. Squires, Patrick M. McCue and George E. Seidel

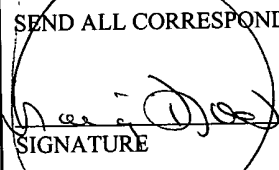
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is the FIRST submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is the SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b)) and PCT articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ has been transmitted by the International Bureau.
  - c. ☒ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

## Items 11. to 16. below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98 along with copies of cited references.
12. ☒ An assignment document for recording for Edward L. Squires, Patrick M. McCue and George E. Seidel. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included along with a recordation fee.
13. ☒ A FIRST preliminary amendment.
14. ☐ A SECOND or SUBSEQUENT preliminary amendment.
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and or address letter.
16. ☒ Other items or information:
  - a. Verified Statement Establishing Small Entity Status (Small Business)
  - b. Verified Statement Establishing Small Entity Status (University Employee)
  - c. Verified Statement Establishing Small Entity Status (University)
  - d. a Declaration for Patent Application of Edward L. Squires, Patrick M. McCue and George E. Seidel
  - e. Power of Attorney of Dr. Mervyn Jacobson, President of XY, Inc.
  - f. a copy of the Specification and drawings of the PCT application as filed
  - g. a copy of the Article 34 Amendment
  - h. a Power of Attorney for Arundeeep S. Pradhan, Director of Technology Transfer for Colorado State University Research Foundation as agent for Colorado State University
  - i. a Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) concerning a filing under 35 U.S.C. 371 (Form PTO-1390, rev 11-98) with attachments
  - j. a Letter of Transmittal
  - k. a check in the amount of \$964.00
  - l. Certificates of Express Mailing for each document

09/744615

U.S. APPLICATION NO. (If known, <span style="background-color: black; color: black;">XXXX</span> 1.5 60/094,720 60/113,143		INTERNATIONAL APPLICATION NO PCT/US99/17165		ATTORNEY'S DOCKET NUMBER XY-Equine3-USNP <b>525 Rec'd PCT/PTO 29 JAN 2001</b>	
17. <input type="checkbox"/> The following fees are submitted: <b>BASIC NATIONAL FEE (37 CFR 1.492(a) (1) - (5):</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO. . . . . \$970.00  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO. . . . . \$840.00  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO. . . \$760.00  International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4). . . . . \$670.00  International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfy provisions of PCT Article 33(1)-(4). . . . . \$ 96.00  <div style="text-align: center;"><b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b></div>				CALCULATIONS (PTO USE ONLY)	
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$ 0	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	71-20 =	52	X \$18.00	\$ 918.00	
Independant claims	3- 3 =	0	X \$78.00	\$ 0	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) +\$260.00				\$ 260.00	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$ 1848.00	
Reduction of 1/2 for filing by small entity, if applicable. A Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28).				\$ 924.00	
<b>SUBTOTAL =</b>				\$ 924.00	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$ 0	
<b>TOTAL NATIONAL FEE =</b>				\$ 924.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$ 40.00	
<b>TOTAL FEES ENCLOSED =</b>				\$ 964.00	
Amount to be:				Refunded	\$
				Charged	\$
a. <input checked="" type="checkbox"/> A check in the amount of \$ <u>964.00</u> to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. c. <input type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any over payment to Deposit Account No. _____. A Duplicate copy of this sheet is enclosed.					
<b>Note: Where the appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b))          must be filed and granted to restore the application to pending process.</b>					
SEND ALL CORRESPONDENCE TO: Craig R. Miles, Santangelo Law Offices, P.C., 125 S. Howes, 3 <sup>rd</sup> Floor, Fort Collins, CO 80521					
 SIGNATURE		<u>1-29-01</u> DATE		<u>Craig R. Miles</u> NAME	
				<u>45,954</u> REGISTRATION NUMBER	

Express Mail No. EL728559173US  
Attorney Docket:XY-Equine3-USNP

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IN THE UNITED STATES PATENT AND  
TRADEMARK OFFICE  
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In Re the Application of:

Edward L. Squires, Patrick M. McCue and George E. Seidel

For: Equine System for Non-Surgical Artificial Insemination

Serial Number: (original US) 60/094,720 (new) \_\_\_\_\_  
(original US) 60/113,143  
(PCT) PCT/US99/17165

Filed: (original US) 30 July 1998 (new) \_\_\_\_\_  
(original US) 18 December 1998  
(PCT) 29 July 1999

Assignee: XY, Inc. and Colorado State University through its agent Colorado State  
University Research Foundation

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**LETTER OF TRANSMITTAL**

Assistant Commissioner for Patents  
BOX PCT  
Washington, D.C. 20231

Dear Commissioner:

Enclosed for filing with the United States Designated/Elected Office (DO/EO/US) are the following documents under 35 U.S.C. §371:

- a. A First Preliminary Amendment to be entered with this filing prior to calculation of the filing fee;
- b. a Declaration for Patent Application of Edward L. Squires, Patrick M. McCue and George E. Seidel;
- c. an Assignment of Patent Rights for Edward L. Squires, Patrick M. McCue and George E. Seidel along with a recordation cover sheet and recordation fee;

- d. a Power of Attorney for XY, Inc.;
- e. a Power of Attorney for Colorado State University through its agent Colorado State University Research Foundation;
- f. a Verified Statement Establishing Small Entity Status 37 CFR 1.9(e) -- University or Other Institution of Higher Learning;
- g. a Verified Statement Establishing Small Entity Status (Small Business Concern);
- h. a Verified Statement Establishing Small Entity Status (University Employee);
- i. a Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) concerning a filing under 35 U.S.C. 371 (Form PTO-1390, rev 11-98) with attachments;
- j. a copy of the Specification consisting of 76 pages and a copy of the drawings consisting of 2 pages as originally filed in the PCT;
- k. a copy of the Article 34 Amendment;
- l. an Information Disclosure Citation under 37 CFR 1.97 and 1.98 with copies of cited references;
- m. a check payable to the Commissioner of Patents and Trademarks in the amount of \$964.00 (\$924.00 for the National Fee and \$40.00 for the fee for recording assignment);
- n. Express Mail Certificates for each document; and
- o. this Letter of Transmittal.

**Please note: This application, filed under 35 U.S.C. § 371, is the National Stage of International Patent Application, Serial No. PCT/US99/17165, which claims the benefit of U.S. Provisional Patent Application No. 60/094,720 and U.S. Provisional Patent Application No. 60/113,143.**

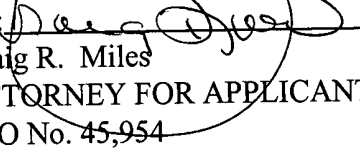
I have this 29 day of January, 2001, either myself personally or through my direction of staff at this office, deposited all of the items in the above letter of transmittal with the United States Postal Service as Express Mail, postage prepaid, in an envelope addressed to: The Assistant Commissioner for Patents, Box PCT, Washington, D.C. 20231.

09/744675  
525 Rec'd PCT/PTO 29 JAN 2001

Please confirm receipt of the documents by applying your date stamp and serial number on the enclosed postcard and returning it to me.

Dated this 29 day of January, 2001.

Respectfully Submitted,  
SANTANGELO LAW OFFICES, P.C.

By:   
Craig R. Miles  
ATTORNEY FOR APPLICANT  
PTO No. 45,954  
125 South Howes, Third Floor  
Fort Collins, Colorado 80521  
(970) 224-3100

09/744675

525 Rec'd PCT/PTO 29 JAN 2001

Express Mail No. EL728559173US  
Attorney Docket:XY-Equine3-USNP

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IN THE UNITED STATES PATENT AND  
TRADEMARK OFFICE  
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In Re the Application of:

Edward L. Squires, Patrick M. McCue and George E. Seidel

For: Equine System for Non-Surgical Artificial Insemination

Serial Number: (original US) 60/094,720 (new) \_\_\_\_\_  
(original US) 60/113,143  
(PCT) PCT/US99/17165

Filed: (original US) 30 July 1998 (new) \_\_\_\_\_  
(original US) 18 December 1998  
(PCT) 29 July 1999

Assignee: Colorado State University through its agent Colorado State University  
Research Foundation

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**CERTIFICATE OF EXPRESS MAILING**

I, Shannon Nation-Kammerer, hereby certify to the truth of the following items:

1. I am an employee of Santangelo Law Offices, P.C., 125 South Howes, Third Floor, Fort Collins, Colorado 80521.

2. I have this day deposited the attached Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) concerning a filing under 35 U.S.C. 371 (Form PTO-1390, rev. 11-98) and attachments, with the United States Postal Service as "Express Mail" for mailing to the Assistant Commissioner of Patents, Box PCT, Washington, D.C. 20231.

Dated this 29 day of January, 2001.

Shannon N. Nation-Kammerer